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10/674,627	09/29/2003	Prajakta S. Joshi	350078.409	4709
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/674,627

Applicant(s)

JOSHI, PRAJAKTA S.

Examiner

TED T. VO

Art Unit

2191

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 07 October 2008.
2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 34-62 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) 34-62 is/are rejected.
7) ☐ Claim(s) _____ is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SD/US)
Paper No(s)/Mail Date 10/07/08
4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____

DETAILED ACTION

1. This action is in response to the amendment filed on 10/07/2008.

Claims 34-62 are pending in the application.

Response to Arguments

2. This is in response to the arguments in Remarks, filed on 10/07/08.

In regard to the Affidavit/Declaration submitted on 10/07/2008, it should be noted that the Affidavit/Declaration filed under 35 CFR 130, 131, 132 is for the purpose to disqualify the references of a rejection. For a reference of 102(a) type, it requires the Affidavit/Declaration with diligent efforts. An Affidavit/Declaration cannot disqualify a reference which is statutory bar; i.e. it is known by publics for more than one year prior to the effective filing date of an application. Furthermore, the generic method/system of the current claims reads on these references presenting in the office action. Therefore, the submitted Affidavit/Declaration cannot disqualify these references of statutory bar.

In response to the argument to the rejection of claims anticipate by the White paper, particularly, the claim 34 which is currently amended:

A method of providing load balancing using a load balance switch and a plurality of site switches that each couple at least one host server to a network, the method comprising:
obtaining at one of said site switches mapping information that provides a translation between a private virtual IP address, configured at said site switch and associated with said at least one host server corresponding to said site switch, and a public virtual IP address; and

providing, by said site switch, said public virtual IP address to at least one load balancing controller to enable said load balancing controller.

As addressed in the argument remarks, p. 12-13, it appears the argument remarks direct to a feature in the claims “site switch” and the argument is that White paper “controller GSLB” does not act “site switch”

Examiner response: It should be noted that the claims’ functionality is “*obtaining at one of said site switches mapping information that provides a translation between a private virtual IP address, configured at said site switch and associated with said at least one host server corresponding to said site switch, and a private virtual IP address*”; (Emphasis added)

The term “site switch” appears being generic; the specification has named it without any infrastructure for distinguishing. A “switch” that locates a site shown in the references, and acts as being configuring for changing meet the definition. As cited by the Examiner, the switch is between a private virtual IP address and a private virtual IP address. See Figure in p. 6, and the explanation of DNS lookup process.

It should be noted that the rejection of claims being anticipated by a prior art is proper if the prior art reference discloses, either expressly or inherently, each limitation of a claim invalidates that claim by anticipation. *Perricone v. Medicis Pharmaceutical Corp.*, 432 F.3d 1368, 1375-76, 77 USPQ2d 1321, 1325-26 (Fed. Cir. 2005), citing *Minn. Mining & Mfg. Co. v. Johnson & Johnson Orthopaedics, Inc.*, 976 F.2d 1559, 1565, 24 USPQ2d 1321, 1326 (Fed. Cir. 1992). Anticipation of a patent claim requires a finding that the claim at issue “reads on” a prior art reference. *Atlas Powder Co. v. IRECO, Inc.*, 190 F.3d 1342, 1346, 51 USPQ2d 1943, 1945

(Fed Cir. 1999) ("In other words, **if granting patent protection** on the disputed claim **would allow the patentee to exclude the public from practicing the prior art**, then that claim is anticipated, regardless of whether it also covers subject matter not in the prior art.") (internal citations omitted).

In dependent claims 39, 43, 47, 51, and 56 as addressed, they are generic and have the same functionality as of Claim 34.

Dependent claims 37, 40, 48, 54, and 57, 38, 42, 46, 50, 55, 58, and others are rejected as cited, where Applicants remain maintaining the generic scope of claim 34 without suggestion for amendment consolidation and Applicants do not point out or discuss the patentable features as required under 37 CFR 1.111(b) and (c).

In response to the argument to the rejection of claims 34-62 over Alteon in view of Cisco; especially, for the claim 34, it appears Applicants relied on the submitted affidavit. It should be noted that the Alteon discloses "web switch" at each site, such as site A, site B, and so on, that provides a selection for switching from site A to another site due to the global loading balancing as in the manner of the claims (FIGURE ONE, p. 2).

There is only no naming of "private VIP" and "public VIP" as for obtaining the selection. However, these are only the names. It cannot cause the patentability merely based on a name, i.e. **if granting patent protection** on the disputed claim based on the name **would allow the patentee to exclude the public from practicing the name**. Cisco, on the other hand, shows an application peering protocol, which is in a similar network topology as of Alteon. It includes NDS exchange policies, where each DNS has private VIP addresses and public VIP addresses (see p.

12), where private VIP address is considered as an address connected within a user to his server (See p. 12: user to server1/DNS1) and public VIP address is considered as the connection within DNS1 to other servers (see p.12-13), Alto Cisco shows the act that is configured to switch from a private VIP address for obtaining a public VIP (see p. 2: item 1, see p. 12, item 2, etc). Therefore, it is obvious to an ordinary in the art in combining the arts of Alteon and Cisco with such naming used by Cisco because it is standard (i.e. only terminological uses in expression for VIP addresses in the GSLB).

The generic limitations of the claims read on the a configuration of a DNS for selecting another site. The submitted affidavit fails to address directly on the generic limitations as recited in the claims, that mapped by the office action.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 34-62 are rejected under 35 U.S.C. 102(b) as being anticipated by White Paper from Foundry Networks, “Server Load Balancing in Today’s Web-enabled Enterprises” (Hereinafter: White Paper), 4-2002.

As per Claim 34: White paper discloses,

A method of providing load balancing using a load balance switch and a plurality of site switches that each couple at least one host server to a network, the method comprising:

obtaining at one of said site switches mapping information that provides a translation between a private virtual IP address, configured at said site switch and associated with said at least one host server corresponding to said site switch, and a public virtual IP address; (See p. 6, the Figure – a Site such as the box 4 in the figure, having a Controller GSLB switch that configures to associate with at least one host server: HongKong); and

providing, by said site switch, said public virtual IP address ~~from said site switch to at least one load balancing controller to enable said load balancing controller to update an address record to indicate said public virtual IP address as being associated with said site switch.~~

(See p. 6: Controller GSLB’s response with the information of HongKong web host for load balancing. The update information is performed in the Controller that carries the public VIP address and returns the address to the local DNS of a client in San Francisco. It has the ability to provide network update (See p. 2).

As per Claim 35: White paper discloses, *The method of claim 34 wherein said providing, by said site switch, said public virtual IP address ~~from said site switch to said at least one load~~*

balancing controller includes providing by said site switch said public virtual IP address to a load balancing controller located at said load balance switch (Refer to the operation of the Controller GSLB Switch, and look up process 4, in p. 6).

*As per Claim 36: White paper discloses, **The method of claim 35 wherein said providing, by said site switch, said public virtual IP address ~~from said site switch~~ to said at least one load balancing controller further includes providing by said site switch said public virtual IP address to a load balancing controller located at said site switch, to enable said site switch to balance traffic among plural ones of said at least one host server corresponding to said site switch and associated with said private virtual IP address*** (Refer to the operation of the Controller GSLB Switch, and look up processes 4, for search the best IP address, in p. 6).

*As per Claim 37: White paper discloses, **The method of claim 34 wherein public virtual IP addresses received by said load balancing controller as part of reply to a query for network address and that do not have indication in an address record as being associated with corresponding said site switches, are treated as real IP addresses by said load balancing controller and are excluded from having applied thereto any metric of a load balancing algorithm that is usable with virtual IP addresses***. See the operation in the Figure in Figure 6, and look up process. Particularly, in the paragraph in p. 5, "SLB Technique", discussing about allowing the client to access as a real server for subsequent requests.

*As per Claim 38: White paper discloses, **The method of claim 34 wherein said public virtual IP address provided to said at least one load balancing controller enables said load balancing controller to apply at least one metric of a load balancing algorithm to said public virtual IP***

address, said at least one metric including an active bindings metric that prefers a virtual IP address, configured at respective said site switches, having a maximum number of active ones of said host servers bound to said preferred virtual IP address, rather than preferring another virtual IP address having a number of bound active ones of said host servers that is less than said maximum number (Refer to the functionality of GSLB Metrics™, as seen in the discussion in p. 9, particularly in High Availability and Maximum Scalability).

As per Claim 60: The White paper discloses, *The method of claim 34 wherein said obtaining at said site switch said mapping information includes obtaining at said site switch said mapping information from a mapping device that includes a network address translation device or a firewall device*

(See p. 10, "Firewall Load balancing". It should be note that firewall is no longer new in the art).

As per Claim 39: Regarding, *A method of providing load balancing using a load balance switch and a plurality of site switches that each couple at least one server to a network, the method comprising:*

receiving, at said load balance switch, a public virtual IP address that is mapped to a private virtual IP address configured at one of said site switches, said private virtual IP address being associated with said at least one host server corresponding to said site switch

updating an address record of said load balance switch to indicate said received public virtual IP address as being associated with said site; and

applying, at said load balance switch, at least one metric, usable with virtual IP addresses, of a load balancing algorithm to said public virtual IP address

See rationale addressed in the rejection of Claim 34.

As per Claim 40: Regarding, *The method of claim 39 wherein public virtual IP addresses received by said load balance switch as part of reply to a query for network addresses and that do not have indication in said address record as being associated with corresponding said site switches, are treated as real IP addresses by said load balance switch and are excluded from having applied thereto said at least one metric of said load balancing algorithm that is usable with virtual IP addresses.* See rationale addressed in the rejection of claim 37.

As per Claim 41: Regarding, *The method of claim 39 wherein said receiving said public virtual IP address, at said load balance switch, includes receiving said public virtual IP address at said load balance switch from said site switch, which is remote from said load balance switch, for entry into said address record.* See rationale addressed in the rejection of claim 34.

As per Claim 42: Regarding, *The method of claim 39 wherein said at least one metric includes an active bindings metric that prefers a virtual IP address, configured at respective said site switches, having a maximum number of active ones of said host servers bound to said preferred virtual IP address, rather than preferring another virtual IP address having a number of bound active ones of said host servers that is less than said maximum number.* See rationale addressed in the rejection of Claim 38.

As per Claims 43-46, 61: See the rationale addressed in the rejection of Claim 34-38, 60.

As per Claims 47-50: See the rationale addressed in the rejection of Claim 34-38.

As per Claims 51-55: See the rationale addressed in the rejection of Claim 34-38.

As per Claims 56-59: See the rationale addressed in the rejection of Claim 34-38.

As per claim 62: The claim is indefinite. However, the limitation of claim 62 is similar to claim 60. Therefore, it is rejected as in the same rationale addressed in claim 60.

Claim Rejections – 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 34-62 are rejected under 35 U.S.C. 103(a) as being unpatentable over AltonWebSystems (hereinafter: Alton), "Enhancing Web User Experience with Global Server Load Balancing" in view of Cisco Document (hereinafter: Cisco), "Configuring the CSS Domain Name Service".

As per Claim 34: Alton discloses,

A method of providing load balancing using a load balance switch (Authorized Web Switch) and a plurality of site switches (See Figure One, a web switch at every DNS) that each couple at least one host server to a network, the method comprising:

obtaining at one of said site switches mapping information that provides a translation between a private virtual IP address, configured at said site switch and associated with said at least one host server corresponding to said site switch, and a public virtual IP address;

(See p. 1 and p. 2, Section GSLB overview explains a client, such as the client shown in FIGURE ONE, looks up at a local DNS server (1) asking for a website. The Local DNS, which IP address is considered as local to the client, examines its cache for the website. If the information is not available in the local server, it requests a web switch at an authorized DNS (site A), where at the authorized DNS, the web switch performs a selection, for example, a site B (i.e. translation between local DNS where the Client starts site B (public) in response to the return from the query: configured at said site switch [The web switch at site A] and associated with said at least one host server[site B] corresponding to said site switch), **and**

providing, by said site switch, said public virtual IP address (i.e. the return of "3" with the information of site B) ~~from said site switch to at least one load balancing controller to enable said load balancing controller to update an address record to indicate said public virtual IP address as being associated with said site switch.~~

[DSSP components is embedded in any DNS – See DSSP Updates within Web Switches at site A, Site B, site C etc.]

(See p. 1 and p. 2: In the Figure one, at the web switch site A, it provides a return address of the VIP address site B. See Figure one, and p.3, in associating with GSLB, DSSP components in web switches provide periodic updates and trigger updates: This act addresses “*address record to indicate said public virtual IP address as being associated with said site switch*”.

The Alteon uses the terms “select” to provide web switch at an authorized DNS; does not the name private VIP and public VIP as for obtaining the selection.

Cisco shows an application peering protocol, which is in a similar network topology as of Alteon. It include NDS exchange policies, where each DNS has private VIP addresses and public VIP addresses (see p. 12), where private VIP address is considered as an address connected within a user to his server (See p. 12: user to server1/DNS1) and public VIP address is considered as the connection within DNS1 to other servers (see p.12-13), Alto Cisco shows the act that is configured to switch from a private VIP address for obtaining a public VIP is as “translation” (see p. 2: item 1, see p. 12, item 2, etc).

It would be obvious to ordinary in the art in combining the arts of Alteon (which is lacking using *public virtual IP* when selecting another site) with the teaching of Cisco in resolving domain names using public Internet-routable IP address (Virtual IP address) as a requirement by rules (See P. 12), the obviousness for combination is conforming to the network standard protocol in resolving Domain names.

As per Claim 35: Alteon and Cisco further disclose, ***The method of claim 34 wherein said providing, by said site switch, said public virtual IP address from said site switch to said at***

least one load balancing controller includes providing by said site switch said public virtual IP address to a load balancing controller located at said load balance switch (See p. 2, the Figure one and its explanation, also should refer to the meaning of GSLB).

As per Claim 36: Alteon and Cisco further disclose, The method of claim 35 wherein said providing, by said site switch, said public virtual IP address ~~from said site switch to said at least one load balancing controller further includes providing by said site switch said public virtual IP address to a load balancing controller located at said site switch, to enable said site switch to balance traffic among plural ones of said at least one host server corresponding to said site switch and associated with said private virtual IP address~~ (See Figure one, and GSLB operation).

(Refer to the function of CGS; it provides the best IP addresses based on the info from the GSLB Metrics™ (Also see DNS lookup Process), and causes to select a real server (balancing), as seen in the Figure of p. 5).

*As per Claim 37: Alteon and Cisco further disclose, The method of claim 34 wherein public virtual IP addresses (e.g. site B) *received by said load balancing controller* (e.g. Web switch at site A) *as part of reply to a query for network address* (“2” and “3”) *and that do not have indication in an address record as being associated with corresponding said site switches, are treated as real IP addresses by said load balancing controller and are excluded from having applied thereto any metric of a load balancing algorithm that is usable with virtual IP addresses* (See p. 2, including three bullets, GLSB, develops a list or order list of sites, including site health, and geographic location, and see all last three paragraphs).*

As per Claim 38: Alteon and Cisco further disclose, *The method of claim 34 wherein said public virtual IP address provided to said at least one load balancing controller enables said load balancing controller to apply at least one metric of a load balancing algorithm to said public virtual IP address*, (See GSLB operation in p. 2) *said at least one metric including an active bindings metric that prefers a virtual IP address* (i.e. “web switch”, that provides an order list of sites that DNS uses when responding to the client requests), *configured at respective said site switches, having a maximum number of active ones of said host servers bound to said preferred virtual IP address, rather than preferring another virtual IP address having a number of bound active ones of said host servers that is less than said maximum number* (See text in p. 2, refer to “maximum connection thresholds”).

As per Claim 60: Alteon and Cisco further disclose, White paper discloses, *The method of claim 34 wherein said obtaining at said site switch said mapping information includes obtaining at said site switch said mapping information from a mapping device that includes a network address translation device or a firewall device* (see p. 6, all four categories in Alteon Websystems GSLB Advantages – it includes a firewall devices – It should be note that firewall is no longer new in the art).

As per Claim 39: Regarding, *A method of providing load balancing using a load balance switch and a plurality of site switches that each couple at least one server to a network, the method comprising:*

receiving, at said load balance switch, a public virtual IP address that is mapped to a private virtual IP address configured at one of said site switches, said private virtual IP address being associated with said at least one host server corresponding to said site switch

updating an address record of said load balance switch to indicate said received public virtual IP address as being associated with said site; and

applying, at said load balance switch, at least one metric, usable with virtual IP addresses, of a load balancing algorithm to said public virtual IP address

See rationale addressed in the rejection of Claim 34.

As per Claim 40: Regarding, *The method of claim 39 wherein public virtual IP addresses received by said load balance switch as part of reply to a query for network addresses and that do not have indication in said address record as being associated with corresponding said site switches, are treated as real IP addresses by said load balance switch and are excluded from having applied thereto said at least one metric of said load balancing algorithm that is usable with virtual IP addresses.* See rationale addressed in the rejection of claim 37.

As per Claim 41: Regarding, *The method of claim 39 wherein said receiving said public virtual IP address, at said load balance switch, includes receiving said public virtual IP address at said load balance switch from said site switch, which is remote from said load balance switch, for entry into said address record.* See rationale addressed in the rejection of claim 34.

As per Claim 42: Regarding, *The method of claim 39 wherein said at least one metric includes an active bindings metric that prefers a virtual IP address, configured at respective said site switches, having a maximum number of active ones of said host servers bound to said preferred virtual IP address, rather than preferring another virtual IP address having a*

number of bound active ones of said host servers that is less than said maximum number. See rationale addressed in the rejection of Claim 38.

As per Claims 43-46, 61: See the rationale addressed in the rejection of Claim 34-38, 60.

As per Claims 47-50: See the rationale addressed in the rejection of Claim 34-38.

As per Claims 51-55: See the rationale addressed in the rejection of Claim 34-38.

As per Claims 56-59: See the rationale addressed in the rejection of Claim 34-38.

As per claim 62: The claim is indefinite. However, the limitation of claim 62 is similar to claim 60. Therefore, it is rejected as in the same rationale addressed in claim 60.

Conclusion

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ted T. Vo whose telephone number is (571) 272-3706. The examiner can normally be reached on 8:00AM to 4:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wei Y. Zhen can be reached on (571) 272-3708.

The facsimile number for the organization where this application or proceeding is assigned is the Central Facsimile number 571-273-8300.

Any inquiry of a general nature or relating to the status of this application should be directed to the TC 2100 Group receptionist: 571-272-2100. Information regarding the status of

an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

TTV
December 12, 2008

/Ted T. Vo/
Primary Examiner, Art Unit 2191